

REMARKS

I. STATUS OF THE CLAIMS

Claims 1 and 5-20 are pending in the present Application. Claims 1, 5-20 are withdrawn without prejudice or disclaimer of the subject matter therein. Claims 21-27 are added by the present amendment.

Claims 9-20 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 5-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Weaver D456,644 in view of Corson, 6,283,564.

Claims 9, 12, 15 and 18 are rejected under 35 U.S.C. § 102(b) as being anticipated by Elmer, 4,188,067.

Claims 1, 5-8, 10-11, 16 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elmer, 4,188,067, in view of Grisley, 5,711,356.

Claims 13, 14, 19 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Elmer, 4,188,067.

Applicant respectfully traverses all rejections and requests reconsideration.

A. REJECTION UNDER 35 U.S.C. § 112

As mentioned above, Claims 9-20 are rejected under 35 U.S.C. § 112, second paragraph, (hereinafter "Section 112"), as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In rejecting Claims 9-20, Examiner stated that:

"Regarding claim 9, it is unclear whether applicant is claiming a table with three or more joints or a double locking mortise joint as indicated in the preamble of the claim, which implies only one joint and contradictory to line 25. Furthermore, the limitation 'three or more of said (the) joint' in line 25 is grammatically incorrect .

Regarding claims 10-14, the claims depend from claim 9 and therefore are indefinite.

Regarding claim 15, it is unclear to what features of the invention does the joint provide support and stabilization as recited in line 24. Furthermore, it is

unclear whether tabletop edge and tabletop have the same connotation.”
(Office Action, pg. 2)

Applicant has withdrawn claims 9-20 and added claims 21-27. New claim 21 recites, “a plurality of double locking mortise joints for a table having four table legs and a tabletop having four tabletop edges, each of said legs being independently and separately removable from every other of said legs, each of said joints comprising: a first mortise on each of said legs, ... a second mortise on each of said tabletop edges.” Claims 22-26 depend directly on claim 21.

Accordingly, Applicant respectfully submits that new claims 21-27 are allowable under Section 112.

B. REJECTION UNDER NONSTATUTORY OBVIOUSNESS-TYPE DOUBLE
PATENTING

As mentioned above, claims 1, and 5-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Weaver D456,644 in view of Corson, 6,283,564.

By the present amendment claims 1, and 5-20 have been withdrawn.

C. REJECTION UNDER 35 U.S.C § 102(b)

As mentioned above, claims 9, 12, 15 and 18 are rejected under 35 U.S.C. § 102(b), (hereinafter “Section 102(b)”) as being anticipated by Elmer, 4,188,067, (hereinafter “Elmer”). In rejecting claims 9 and 15, the Examiner stated:

Regarding claim 9 and 15, as best understood, “Elmer discloses, in Figures 5 and 8, a double locking mortise joint comprising a table leg and a tabletop edge. The table leg has a first mortise. ... The first mortise has a gusset body, a gusset top, a head bottom and a first mortise end. The gusset top serves as one side of the triangular shape.” (Office Action, pg. 6-8)

Applicant has withdrawn claims 9-20 and added claims 21-27. New claim 21 recites, “a plurality of double locking mortise joints for a table having four table legs and a tabletop having four tabletop edges, each of said legs being independently and separately removable from every other of said legs, each of said joints comprising: a first mortise on each of said legs, ... a second mortise on each of said tabletop edges.” Elmer discloses “a chair of knock-

down construction, comprising: two legs.” (Elmer, Claim 1, lines 52-53). Nowhere does Elmer recite “a plurality of double locking mortise joints for a table having four table legs and a tabletop having four tabletop edges, each of said legs being independently and separately removable from every other of said legs, each of said joints comprising: a first mortise on each of said legs, ... a second mortise on each of said tabletop edges,” as claimed in Applicant’s invention.

Accordingly, Applicant respectfully submits that new claims 21-27 are allowable over Elmer, under Section 102(b).

D. REJECTION UNDER 35 U.S.C § 103(a)

As mentioned above, claims 1, 5-8, 10-11, 16 and 17 are rejected under 35 U.S.C. § 103(a), (hereinafter “Section 103(a)”) as being unpatentable over Elmer, in view of Grisley, 5,711,356, (hereinafter “Grisley”). In rejecting the claims, the Examiner stated:

“Regarding claim 1, Elmer discloses, in Figures 5 and 8, a double locking mortise joint comprising a first member and a second member.” (Office Action, pg.9)

Regarding claims 10 and 16, Grisley teaches “at least one of two mortise corners being rounded as part of design choice. Therefore, as taught by Grisley, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make at least one of the two mortise corners being rounded instead of being square-edged as part of a design choice.” (Office Action, pg. 6-8)

“Regarding claims 11 and 17, as modified above, Grisley teaches both of the mortise corners are rounded.” (Office Action, pg. 6-8)

Applicant respectfully traverses Examiner’s rejections as explained below.

Elmer

Elmer discloses “a chair of knock-down construction, comprising: two legs.” (Elmer, Claim 1, lines 52-53).

Grisley

Grisley discusses a template to support and guide a cutting tool used to cut joint members in a work piece. See Grisley Fig. 1. The template is intended for making finger joints or box joints. (Grisley, col. 1, lines 8-10 and col. 2, lines 38-29). Grisley further teaches round end-on-end finger joints. (Figure 9c).

Claims 1, 5-8, 10-11, 16 and 17 have been withdrawn and new claims 21-27 have been added and are allowable over Elmer, in view of Grisley

The three criteria for establishing a prima facie case of obviousness must exist at the time the claimed invention was made, according to the text of Section 103(a) itself. The Examiner has not established a prima facie case of obviousness using Elmer and Grisley for at least the reasons stated below.

Regarding the newly added claims 21-27, there is no suggestion or motivation in Grisley to modify Elmer to make these claims unpatentable. In particular, there is no suggestion or motivation in the prior art to modify Elmer to obtain the limitations recited in claim 22 of “at least one of said two mortise corners is rounded”. Grisley has been specifically cited as teaching in figures 9b and 9c, finger joints with rounded corners. As Applicant had discussed in the background section of the specification, the problem with finger joints is that when the two boards are joined together, the weight from the two boards on either side of the joint puts stress on the joint and weakens the structural integrity of the joint. (See Applicant’s Specification, par. 0015, page 6, lines 10-13). Thus, the finger joint provides no shear strength and is mainly used for making moldings and trims. The molding formed by a finger joint is always fastened to a wall, ceiling, or other flat and strong substrate to maximize its strength. Lastly, an adhesive must be used to secure the finger joint. (See Specification, par. 0015, page 6 lines 8-17). As discussed in the MPEP, “A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220.” (See §2141.02) “The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680.” (See §2141.03) “It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743” (See §2145(X)(D)(2)). Grisley provides no motivation to modify or combine references to obtain Applicant’s claimed invention but rather teaches away from Applicant’s claimed invention by its disclosure of finger joint production, an undesirable joint having numerous shortcomings as specifically discussed in the Applicant’s specification. There is no objective reason to combine the teachings of the references.

Applicant discusses that either one or both of the mortise corners may be rounded and still provide “quick as well as secure assembly of the members” (See Applicant’s Specification, par. 0035, page 11, line 20) without the need for “tools, fastening material, or joint pieces”. (Specification, par. 0035, page 11, line 24). There is “structural integrity in the resulting joint”, providing both good vertical strength as well as shear strength. (Specification, par. 0038, page 12, lines 20-21). Therefore, the rounding of the mortise corners is important not only in providing an aesthetically pleasing design but further contributes to the stability and ease in assembly of the joint. Such teachings are nowhere found in the combination of Grisley with Elmer.

The second reason is there is no expectation of success for using the finger joint design of Grisley in combination with Elmer. Again, the use of finger joints are used for moldings and trims and would not have been used in structures such as the knock-down chair of Elmer requiring shear strength. In fact, Grisley teaches a template making joints with rounded corners whereby the fingers formed by the template are equal in length. (See Grisley Fig. 8, 9a-9f). The template device of Grisley, actually teaches away from Applicant’s structure of the “head bottom is shorter in length than said gusset top”. As such, there is no reasonable expectation of success in using Grisley in combination with Elmer.

The third reason is that the combination of the prior art references does not teach all of the claim limitations. Applicant has added claim 21 to include a “a plurality of double locking mortise joints for a table having four table legs and a tabletop having four tabletop edges, each of said legs being independently and separately removable from every other of said legs, each of said joints comprising: a first mortise on each of said legs, ... a second mortise on each of said tabletop edges” (underlining for emphasis). This limitation is not taught in either Grisley or Elmer. Elmer teaches a “a chair of knock-down construction, comprising: two legs.” (Elmer 4,188,067 Claim 1, lines 52-53). Grisley teaches a template making joint. In addition, claim 21 requires that “said tabletop is supported and stabilized by said joints without any further supporting structural members or connections existing below a horizontal plane which lies at a joining of the first mortise and second mortise.” Nowhere does the combined teaching of Elmer and Grisley include this limitation. In fact, Elmer teaches a “cross-support, extending between the legs, in locked engagement with each of the

legs.” (Elmer Col.1, lines 56-59; Fig. 4). Therefore, not all the limitations of claim 21 are disclosed by Elmer in combination with Grisley.

Thus, all three elements required for a rejection under Section 103(a) are missing with regard to new claims 21 and 27. The lack of any one of the three elements would make these claims allowable over Elmer in combination with Grisley. Claims 22-26, depend directly or indirectly on claim 21, all with additional limitations, and are allowable for at least the same reasons as is claim 21. Accordingly, for the aforementioned reason, no prima facie case of obviousness can be established for claims 21-27.

Accordingly, Applicant respectfully submits that new claims 21-27 are allowable over Elmer, in view of Grisley, under Section 103(a).

E. REJECTION UNDER 35 U.S.C § 103(a)

As mentioned above, claims 13, 14, 19 and 20 are rejected under 35 U.S.C. § 103(a), (hereinafter “Section 103(a)”) as being unpatentable over Elmer. In rejecting the claims, the Examiner stated:

Regarding claims 13 and 19, “Applicant is reminded that it would have been obvious matter of design choice to make the inner side and the outer side parallel to each other since there is no significant problem being solved or that it will serve for any particular purpose.” (Office Action, pg. 13)

“Regarding claims 14 and 20, as modified in claim 13, above, it will be obvious matter of design choice to make the inner side and the outer side have a same curvature.” (Office Action, pg. 13).

Applicant respectfully traverses Examiner’s rejections as explained below.

Claims 13, 14, 19 and 20 have been withdrawn and new claims 21-27 have been added and are allowable over Elmer

A prima facie case of obviousness has not been established using Elmer for at least the reasons stated below.

Regarding new claim 25, there is no suggestion or motivation to modify Elmer to result in the limitations of claim 25, wherein Applicant claims, “said inner side and said outer side (of each of said legs) being substantially parallel to each other.” Examiner reminds Applicant that “it would have been obvious matter of design choice to make the inner side and the outer side parallel to each other since there is no significant problem being solved or

that it will serve for any particular purpose.” Elmer discusses two chair legs that have a “substantially triangular shape; and the chair may further include a cross-support, extending between the legs, in locked engagement with each of the legs.” (Elmer Col.1, lines 56-59). The inner side and outer side of the legs in Elmer are not “substantially parallel to each other,” as claimed by Applicant, but rather triangular in shape. Elmer, in fact, teaches away from legs being “substantially parallel to each other,” because the triangular shape of the leg in Elmer provides a slot for mating with a cross support, thus providing support for the chair. (Elmer Col. 2, lines 63-67). Seat legs having an inner side and an outer side being substantially parallel to each other, as claimed by Applicant, will not support the seat structure discussed in Elmer.

Regarding new claim 26, there is no suggestion or motivation to modify Elmer to result in the limitations of claim 26, wherein Applicant claims, “said inner side and said outer side (of each of said legs) have a same curvature.” Examiner states that “it will be obvious matter of design choice to make the inner side and the outer side have a same curvature.” Applicant respectfully traverses Examiner’s rejection for the same reasons as previously stated above for new claim 25. A leg with said inner side and said outer side (of each of said legs) having a same curvature will not support a seat structure as taught in Elmer.

Furthermore, Elmer does not teach all of the claim limitations as recited in claim 21, a “a plurality of double locking mortise joints for a table having four table legs and a tabletop having four tabletop edges, each of said legs being independently and separately removable from every other of said legs, each of said joints comprising: a first mortise on each of said legs, ... a second mortise on each of said tabletop edges” (underlining for emphasis). In addition, claim 21 requires that “said tabletop is supported and stabilized by said joints without any further supporting structural members or connections existing below a horizontal plane which lies at a joining of the first mortise and second mortise.” Nowhere in Elmer are these limitations taught. Elmer teaches a “a chair of knock-down construction, comprising: two legs.” (Elmer 4,188,067 Claim 1, lines 52-53). Further, in fact, Elmer teaches a “cross-support, extending between the legs, in locked engagement with each of the legs.” (Elmer Col.1, lines 56-59; Fig. 4).

Accordingly, for the aforementioned reasons, no prima facie case of obviousness can be established for new claims 25 or 26. Claims 25-26 depend directly on new claim 21, with further limitations.

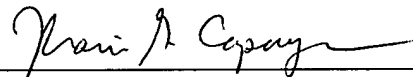
Accordingly, Applicant respectfully submits that new claims 21-27 are allowable over Elmer under Section 103(a).

II. CONCLUSION

The above-discussed amendments and remarks are believed to place the present Application in condition for allowance. Should the Examiner have any questions regarding the above amendments, the Examiner is requested to telephone Applicant's representative at the number listed below.

Respectfully submitted,

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